July 2001



STREET CONTINUES OF THE STREET OF THE STREET

S P E C I A L E D I T I O N



Headquarters Air Force Materiel Command Wright-Patterson Air Force Base, Ohio

> Commander Gen. Lester Lyles

Director of Public Affairs Col. Donna Pastor

Chief Internal Communications Maj. Michael Kelly

> Executive Editor Ms. Libby VanHook

> Assistant Editor Ms. Estella Holmes

Department of Defense Thomas Jefferson Awards First Place, Magazine Format, 1996

Second Place, 1998, 1997, 1995

Air Force Media Awards First Place, Magazine Format, 1998, 1997, 1996, 1995, 1994 Second Place 2000, 1993, 1992 Third Place, 1999



This funded Air Force magazine is an authorized publication published monthly for the people of the Air Force Materiel Command. Contents of LEAD-ING EDGE are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Department of the Air Force. The editorial content is edited, prepared and provided by the Public Affairs Office of Headquarters Air Force Materiel Command, 4375 Chidlaw Rd., RM N152, Wright-Patterson AFB, Ohio 45433-5006. The magazine can be found on the Internet on AFMC/PA's home page: https://www.afmcmil.wpafb.af.mil/HQ-AFMC/PA/leading_edge/index. htm. Photographs are official U.S. Air Force photos unless otherwise indicated. Distribution ratio is 8:1. For submission and writers' guidelines, contact the editor at the above address or DSN 787-7602 or (937)257-1203. Send e-mail to: Elizabeth.VanHook@wpafb.af.mil



Graphic design by Tech. Sgt. Bill King, HQ AFMC/XP-AO.

AFMC's Strategic Plan

Overview

- 3 Our path to the future
- Designing and building the Command's 4 flight plan for the future

Mission Areas

- 8 **Product Support**
- 10 Information Services
- Supply Management 12
- 14 **Depot Maintenance**
- Science and Technology 16
- 18 Test and Evaluation
- 20 Information Management
- Installations and Support 21

Enabling Tasks

- **People** 26
- 28 **Expeditionary Combat Support**
- *30* Strategic Assessment
- 31 Financial Management
- 32 **Human Resources**
- 33 **Business Practices**
- 35 Infrastructure

Our path to the future

Gen. Lester L. LylesAFMC Commander

When our crews fly, they must define a destination and a route of flight. They'll file a flight plan to let everyone know that route of flight.

In a very similar manner, our AFMC vision is our destination, our mission statement is our route of flight, and our strategic plan is our flight plan to arrive at our vision. We all need to know and understand the AFMC flight plan, it's our path to the future.

That, in a nutshell, is the reason Air Force Materiel Command has a strategic plan. It defines our destination in our vision statement: "The recognized leader for equipping and supporting America's aerospace force — the warfighter's first choice."

Then it gives the flight plan of our route — our mission statement: "To develop, acquire, and sustain aerospace power needed to defend the United States and its interests...today and tomorrow."

Then it gives the flight plan of our rour rour and statement: "To develop, acquire, and sustain aerospace power needed to defend the United States and its interests...today and tomorrow."

Our route is laid out in more detail in the body of the strategic plan itself.

More than a flight plan

But the strategic plan is more than just a flight plan; it also serves as a tool to make decisions for both the long- and short-term.

We've worked hard to make our strategic plan relevant, both to AFMC people and to our customers, the operational commands.

It's based on Air Force goals and critical future capabilities, and seeks to meet the requirements of the major commands and our warfighting commanders.

We also have in our strategic plan a standard we can use to examine existing and proposed programs — a ground speed check of sorts.

When we analyze a program, we look



Mr. Jody LeBlanc, General Electric Rotor Shop unit chief at Tinker Air Force Base, Okla., shows Gen. Lester Lyles, AFMC Commander, a repair kit designed to reduce repair time of engines during programmed depot maintenance. Initiatives like repair kitting, which provide all the parts and tools necessary to make repairs in one easy package, speeds the return of aircraft to the warfighter. (Photo by Ms. Margo Wright, OC-ALC)

at the goals and objectives in our strategic plan to see if it fits.

It's your support and buy-in, your continued dedication and your commitment to the mission that make us the recognized leader for equipping and supporting America's aerospace force.

Gen. Lester Lyles, AFMC commander

We ask ourselves: Where does this program fit into the big picture? Does it help us meet our objectives?

If it doesn't help us reach a stated objective, we ask another question: Should this program be changed or dropped, or do we need to add another objective?

And then we make that happen.

How you fit in

What does this mean to you?

In addition to the corporate uses for our strategic plan, I see its relevance to everyone in AFMC.

You should be able to look through this edition of the *Leading Edge* or the strategic plan itself, and see where you, your

job and your organization fit in.

I encourage you to do just that. Look

through the pages that follow and see how your unit fits into the bigger picture.

Then, spend some time looking at the other mission areas and see why other units do what they do, and how our efforts work together to equip and sustain the world's finest

Air Force.

I'm sure you'll come away with a deeper appreciation of the essential roles you and this command perform in support of the Air Force and our nation.

How you can help

You'll also be armed with a broader understanding and perspective of where we're heading in our flight path and how you can help us get there.

It's your support and buy-in, your continued dedication and your commitment to the mission that make us the recognized leader for equipping and supporting America's aerospace force.

It's because of you that we are the warfighter's first choice.

AFMC's Strategic Plan

Designing and building the Command's blueprint for the future

Maj. Gen. Todd StewartDirector of Plans and Programs

Planning is an integral part of achieving a desired future state through defined goals and objectives. The plan forms the basis for our programming—both fiscal and manpower; helps set our budget priorities and tells how to most effectively allocate scarce resources.

It provides the all-important bridge connecting us to higherorder planning at national, Defense Department and Air Force levels. This connective link between Air Force mission essential tasks and our Air Force Materiel Command mission area and center mission essential tasks forms a bridge translating Air Force vision and customer command requirements into effective command action.

This transformation from vision to effective action occurs because the plan explains what is important to us and where we should direct our precious resources to most effectively and efficiently meet our using-command customers' expectations.

Building upon past success

AFMC is in the midst of a concerted effort to shape the work force of the future, with renewed emphasis on recruiting people with high-tech skills and expanding our commitment to education and training.

We played a major role in implementation of Expeditionary Air Force objectives in operations support, logistics and modernization. We have also made good progress in the battle to control costs, though, certainly, much more needs to be done.

This is where the progress-monitoring feature of strategic planning becomes so important. Progress reporting provides the structure, process and discipline to periodically measure achievement; strategic plan progress assessment shows the commander where the command stands in its journey of transformation to the desired future end-state.

The benefit of this progress monitoring feedback is threefold: it allows us to assess what is not working and fix it; it tells us what is working so we can build on it and it provides essential benchmarking for future strategic planning.

But the strategic plan is not just a benchmark or a scorecard. In its fullest sense, it provides a recipe for future success by laying out resource application and priorities.

Our priorities should all be outlined in the plan. If we identify a priority that's not in the plan, then we should add it to the plan, or decide it's not a priority.

Adaptive and user friendly

So the strategic planning process must be as adaptive and user friendly as we can make it. When changes occur, we want to add them to the plan as rapidly as possible. Only then can appropri-



Maj. Gen. Todd Stewart, director of plans, and Dr. J. Daniel Stewart, AFMC executive director, discuss a strategic management information system for tracking and reporting the status of strategic planning. (Photo by Ms. Estella Holmes, AFMC Public Affairs)

ate modifications to programs, budgets and processes follow in a natural, orderly and timely way.

In order for the plan to be this responsive, it really needs to be "electronic." The metrics tracking our progress should also be accessible in real-time, electronically. An "e-planning" process needs to become a way of life in our command.

Only when we get the plan "off the coffee table" and onto a database fully accessible from our personal computers will it truly become adaptive and user friendly. Then our plan will be able to react in a timely fashion to significant policy changes, customer priority shifts, process improvements and resource fluctuations.

The result will be a plan that is more responsive to the needs of the command and, most importantly, our customers. The plan will have achieved its rightful place as the central and indispensable tool in learning from past performance, building upon past success and meeting customer needs while coping with an ever-changing environment.

Customer focus

Addressing the changing environment necessitates asking ourselves if our "game plan" is relevant, given the influences, constraints and expectations facing the command. The game plan must be set out in sufficient detail to permit the reader to understand AFMC priorities and to propose changes that will improve future action. Members of the AFMC action team can check whether what we're doing is relevant to where the command is going.

At the same time, our external customers can consult the plan and ask if we are acting in ways designed to most effectively meet their mission needs. If we're not, they can point out where we can improve support to their mission. This external customer connection is one of the most important aspects of our current strategic planning process.

In developing this year's plan, we brought in our major command customer representatives to brief the senior planners off-site. Each told us where their commands were going and what their priorities were.

Customer participation

With this customer participation, we've been able to emphasize the linkage to our customers' strategic plans, and thus outline what we need to do to support them more effectively.

Understanding our customers' expectations helps us maintain relevance.

In the future, we hope to involve our customers in AFMC's strategic planning process to an even greater extent. Our goal is to provide even better linkage between our respective strategic

plans and to make it even clearer how AFMC's strategic planning goals, objectives, and mission essential tasks support the goals, objectives, and mission essential tasks of our using command customers.

Action plans

Just as we involved our command-level customers in the formulation of the overall AFMC strategic plan, our mission areas will be working with their major command customer counterparts as they develop action plans for their mission area objectives.

Of course, the needs of our customers provide only one piece of the changing environment in which we operate.

National defense policy and available resources are also major factors. Some might argue that it is a waste of time to do strategic planning in such a dynamic, uncertain environment at the national level, with a new administration and unknown future appropriations and budgets.

I would argue just the opposite: in times of rapid change and uncertainty, the strategic plan is even more important. The plan provides a solid baseline or point of departure from which to make reasoned judgments about how to adapt or reprioritize the things we can control or influence to more effectively deal with changes in our operational environment over which we have far less control and influence.

It also helps us track progress. While a changing environment

may dictate a change in methods or priorities, tracking progress against strategic objectives will always help you determine where you are as compared to where you started and what you desire to achieve.

The planning process

AFMC's fiscal 2002-2009 strategic plan development process began with a comprehensive examination and assessment of the foundations of our command's part in maintaining our national aerospace force. We also reviewed Air Force vision, mission and planning documents.

The process linked vision and operations in a cascading strategic and operational continuum to establish command mission essential tasks, enabling tasks and strategic objectives.

The first major step in preparing the fiscal 2002-2009 AFMC strategic plan was the AFMC senior planners' off-site. Participants included representatives from AFMC headquarters and the centers.

Their charter was to develop the core elements of the command plan for subsequent approval by the command council. Since this plan will drive the command's performance and guide our planning, programming, budgeting and execution over

an eight-year period, its formulation was one of the most important undertakings of the command.

The senior planners analyzed the planning environment (Air Force-level, customer and internal), to understand its current state and define the most desired future state. A "gap analysis" determined the actions necessary to carry the command forward from the current state to the desired end-state.

We considered Air Force planning guidance, the expressed desires of our customer commands and strategic guidance and direction from our AFMC commander. We focused on the evolving nature of the Air Force vision, changing requirements of our



Tech. Sgt. Dan Stevens, 411th Flight Test Squadron at Edwards Air Force Base, Calif., uses a non-contact infrared thermometer while curing the coating on an F-22 Raptor. To ensure Edwards continues flight-testing large programs such as the F-22, the 412th Test Wing is re-engineering the way it does business. See the Test and Evaluation Mission Area on pages 18-19. (Photo by Mr. Derk Blanset, AFFTC)

Plan continued on page 6

Plan continued from page 5

customers and commander's emphasis on improving our effectiveness and efficiency while ensuring we remain relevant.

This plan is a major revision of the previous plan (October 1999), introducing the concept of enabling tasks and providing a comprehensive set of mission essential tasks and strategic objectives at both the command and mission-area levels.

Core elements

The plan presents the mission statement, vision, goals, mission essential tasks, enabling tasks and strategic objectives that define the command's priorities for improvement and guide planning, programming, budgeting and execution throughout the planning period. These core elements provide the baseline for mission area and enabling task strategic plans, which include the detailed strategies and guidance required to implement the plan command-wide.

While AFMC's strategic plan drives mission performance through fiscal 2009, it is primarily focused on the period beginning with the fiscal 2004 program objective memorandum development in fiscal 2002.

It will also guide the subsequent-year development of the fiscal 2005 amended program objective memorandum. The plan is designed to guide the mission areas and centers in preparing subordinate-level strategic plans as well as supporting the Air Force strategic plan.

Plan linkage

AFMC's strategic plan supports the Air Force vision, longrange planning guidance, aerospace integration plan and related planning documents by defining corporate priorities critical to shaping the command in a way that ensures the best support of future expeditionary aerospace forces.

It defines nine command mission essential tasks which are at the top of the mission area work breakdown structure and represent the current output this mission area provides for the Air Force. The program funding required to provide these current outputs is the product of the mission area outputs multiplied by the unit cost of the outputs.

The command has also defined seven enabling tasks of critical importance to producing the mission essential tasks. These enabling tasks are "crosscutting" supporting tasks that enable the performance of multiple mission areas.

In this way, the strategic plan defines the desired future performance level to support Air Force and other higher-level plans, customer requirements and internal command priorities. This future performance is defined by strategic objectives supporting mission essential tasks and enabling tasks that specify the output to be obtained.

Just as the strategic plan implements the Air Force vision and related planning documents, it, in turn, is implemented command-wide through mission area strategic plans, enabling task strategic plans and center strategic plans.

Mission area strategic plans include action plans that define the estimated resources required to achieve mission area performance. Mission areas are required to explicitly consider the strategic plan objectives and the resources needed to implement them when developing their mission area plans.

Support of critical future capabilities

Thus, the plan develops a clear linkage from the Air Force's







The AFMC strategic plan guides people at all levels to work together toward shared objectives. Examples include: (Top) Air Combat Commander Gen. John Jumper, left, and Air Force Materiel Command Commander Gen. Lester Lyles get an up close look at the experimental Combined Air Operations Center, an unprecedented inter-command collaboration between ESC and ACC. (U.S. Air Force photo) (Middle) Mr. Mark Wilson and Ms. Angela Larson move incoming freight at Tinker's Defense Logistics Agency facility. (Bottom) Mr. Ty Bouse, left, and jet engine inspectors Mr. Randy Jeffries and Mr. Benjamin Norman are part of a team completing final assembly on an F110-100B engine at Tinker AFB, Okla. (Photos by Ms. Margo Wright, OC-ALC)

critical future capability statements and the expressed desires of our major command customers, through the AFMC commander's guidance, to the resulting mission essential tasks, enabling tasks and objectives. The impacts and influences of these guiding forces had a profound effect in shaping the plan's priorities.

The connection between the Air Force critical future capabilities and the mission essential tasks and enabling tasks in this plan has been mapped to indicate how the mission essential task, the enabling task or one of the supporting objectives directly addresses a critical future capability. Similar mapping also addresses the support expectations of Air Combat Command, Air Mobility Command, Air Force Space Command and Air Education and Training Command and the guidance provided by our AFMC commander.

Objectives define our desired future

As the plan's strategic objectives define our desired future outcomes, outputs and capabilities, they will guide the command programming and program objective memorandum submission, budget execution and resource allocation decisions throughout the planning period.

The program objective memorandum is the mechanism to translate the planned future performance levels into the resources needed to implement the plan.

AFMC's goal is to submit a balanced program objective memorandum to the Air Force. Meeting this goal requires balancing requirements and acceptable risk and allocating total obligational authority to the highest-priority requirements. Current operations requirements (mission essential tasks and enabling tasks) must be balanced with investments for recapitalization and transforming for the future (strategic objectives).

Dynamic linkage

In an ideal world, program objective memorandum priorities would be a direct reflection of the strategic plan. Realistically, however, Air Force planning priorities can change or new requirements may emerge from our customers that must be considered in balancing the AFMC program objective memorandum. Thus, there must be a dynamic linkage between planning and programming.

We must be able to execute the action plans for accomplishing the strategic plan's goals and objectives within the resources funded in the program objective memorandum and amended program objective memorandum.

If changes are made to our program (for example, a cut in projected resources), we must adjust the plan accordingly to keep it executable. We can do this by reducing outputs, introducing efficiencies or extending completion dates.

Since the strategic plan defines the command's priorities for the future, the plan and the associated program must always be in balance. By maintaining this dynamic link between our strategic plan and our programming, budgeting and resource allocation decisions, we will chart a clear course on the roadmap to the AFMC vision.



AFMC's strategic plan supports the acquisition and integration of weapons systems like Boeing's B-2 Spirit bomber. The Strategic plan is a key document that helps the command direct their resources to most effectively support customer expectations — in this case Air Combat Command. B-2s undergo depot maintenance at Hill Air Force Base, Utah. (U.S. Air Force photo)

Delivering superior systems

Maj. Gen. Mike Wiedemer Product Support Chief Operations Officer

embers of Air Force Materiel Command's Product Support Mission Area strive to improve operational effectiveness of weapon systems and reduce lifecycle costs.

This mission area supplies life-cycle management services to plan, develop, acquire, modify and technically sustain highly effective and affordable aerospace weapon systems.

This mission area includes more than 20,000 individuals who manage investment programs valued at more than \$20 billion, while providing technical support for approximately 1,000 aeronautical, space, armament and command and control operational systems. The fiscal 2001 budget includes \$2 billion to accomplish this mission.

Customers, products and services

Product support primarily performs life-cycle management services for the Air Force's operational major commands. However, approximately 12 percent of the mission area's annual revenue is generated via services produced for non-Air Force customers. Non-Air Force customers include nations in the foreign military sales program, other services and federal agencies.

The mission area operates in concert with the Air Force's pro-

gram executive officers, designated acquisition commanders and AFMC center commanders to provide war-fighting solutions.

The mission area's products consist of 86 major product and program areas as outlined in the Air Force System Information Library located at https://pml.wpafb.af.mil/.

Products range from new state-of-the-art, cutting-edge technology programs like the F-22, to aging system programs that have been in the inventory for generations, such as the B-52.

Changing environments

Although world political circumstances have made a major war appear unlikely, the number of smaller, less defined and unpredictable threats has increased.

Product support must provide weapon systems possessing a technological edge while being safe, effective, supportable, timely and affordable.

In the future, the Air Force will develop fewer new systems and will extend its reliance on modernizing aging aerospace system assets. While focusing on maintaining our technological edge, we will increase emphasis on modifying systems to keep pace with evolving threats and operational requirements.

The mission area products and services will take on the "system of systems" characteristic in a new way. Product support will implement a new senior Air Force-endorsed initiative referred to as enterprise management. This initiative creates sin-

Product



Support



Mission Essential Task: Provide world class products and services, delivering dominant aerospace systems and superior life-cycle management.

- □ Develop a process to identify source of funding and establish a plan for cross-platform and enterprise modernization and developmental planning capabilities by the end of calendar year 2001.
- □ Satisfy the highest-priority rapid-turn requirement for each major command as agreed to with customers.
- □ Determine changes in AFMC organizational structures and processes needed to improve responsiveness to cus tomer requirements and provide recommendations to AFMC/CC by the end of fiscal 2002.
- ☐ Identify and improve processes, prioritize aging and common systems capabilities consistent with warfighter requirements, advocate funding, and improve the percent of common system initiatives fielded by the warfighter.
- ☐ Improve platform mission capable rates that are controlled by AFMC processes.
- □ Assure that operational safety, suitability and effectiveness baseline characteristics are established, and all certification required by Air Force policy are obtained no later than the end of fiscal 2005.
- □ Manage costs to live within the budget while working to attain an 8 percent slope from the fiscal 1998 baseline.
- ☐ Meet all critical requirements and 90-100% of user technical support requirements in readiness, maintainability, reliability and technical order compliance.
- □ Deploy policy and tools, including simulation-based acquisition, that improve processes and program execution by the end of fiscal 2003.
- □ Establish a readiness status reporting system by the end of fiscal 2001.
- □ Work to eliminate sustainment shortfalls based on the system program directors assessment of requirements, start ing with fiscal 2004 programming exercise.
- □ System program directors will establish service level agreements with each supplier, including weapon system stan dards by the end of fiscal 2001, establish service level agreements with each major command customer to set readiness standards by the end of fiscal 2002.

gle focal points for "system of systems" decisions and is intended to make military operations more efficient. The five enterprise areas are: aeronautical; space and missiles; command and control; armament; and logistics.

Each enterprise area will be led by the respective center commanders. These commanders, in coordination with program executive officers, are responsible for looking for opportunities to support common system requirements, "system of systems" architectures and crosscutting systems solutions in order to achieve horizontal and vertical systems integration.

Systems capability needs to be brought on line within the context of the evolving Air Force aerospace mission. To meet this challenge, the mission area will generate capabilities that cross the lines of authority of specific system acquisition efforts.

The average age of active Air Force aircraft is 20.5 years, a factor which leads to such problems as corrosion, parts obsolescence and vanishing vendors. Aging systems cost more to maintain and operate because they introduce "technical surprises" for which there are no current plans.

Customer experience with historical costs and program office support can lead to unrealistic expectations. Product support is building service level agreements with customers and suppliers that will ensure realistic linkage of requirements and production.

Additionally, a business challenge is to find economies of scale and define a strategy for successful programming and funding of such efforts. Product support is looking for efficiencies in common or interoperable solutions that can migrate from being system specific solutions to being Air Force-wide solutions.

The mission area continues to embrace acquisition excellence and explore ways to conduct business that can significantly reduce the time it takes to deliver capability to the war fighter and to drive down costs. We will pursue e-business solutions to support government and industry needs. We'll also use simulation based acquisition approaches to reduce development and testing time. Additionally, evolving modeling and simulation technologies offer opportunities for improved acquisition decision support, increased test and evaluation efficiencies and improved training.

Meeting future challenges

The Air Force has a history of delivering effective, state-of-the-art war-fighting systems. This mission area is upholding that tradition. Adaptation of commercial business and accounting practices is a key component of our strategy. Better financial management tools will be used to analyze costs and benefits for determining the best affordability solutions.

We will also increase reliance on commercial versus inhouse engineering, and use commercial standards and off-the-shelf products to the maximum extent possible. This mission area is poised to bring high-quality, integrated war-fighting capability to our customers and keep highly qualified and motivated people performing the mission.

We are looking forward to the challenges of the future and are ready to meet them.



Air Force Materiel Command's Product Support Mission Area supplies lifecycle management services for both older and newer weapon systems. An older system like the B-52H Stratofortress above from the 419th Flight Test Squadron at Edwards Air Force Base, Calif., releases a Joint Direct Attack Munition during a recent test. (U.S. Air Force photo)



One of the newer systems the Product Support Mission Area supplies is the F-22. Here, Raptor 4002 completes its 300th flight-hour mark at Edwards, the first Raptor to do so. (Photo by Mr. Judson Brohmer, AFFTC)

Vision: Leading the best people, assuring the best aerospace weapon systems, supporting the world's best Air Force.

Mission: Deliver superior aerospace systems and support to the warfighter by providing life cycle leadership and integrated command products and services.

Bringing information services to combat support customers

Maj. Gen. Mike Wiedemer Information Services Chief Operating Officer

he Information Services mission area encompasses the Air Force central design activity, providing worldwide, comprehensive life-cycle management of information systems, from development of leading-edge technologies to the maintenance and modification of critically needed existing systems. Its annual operating budget exceeds \$600 million.

More than 2,000 highly skilled military and civilian workers plus 1,900 contractors bring critical information services to our combat support customers.

Many of these skilled employees work in a "hands-on" software production capacity to ensure our software performs as our customers require. Our services are provided on a fee-for-service basis.

Customers, products and services

Information services has two business lines:

Information Technology Solutions. To meet the needs of our customers, we offer development and sustainment of automated systems on various hardware and software platforms for command-level support systems and Air Force base-level standard support systems.

This includes a 24-hour, 7-day per-week field-user help desk for customers to call for hardware and software systems support.

This business line also offers automated information and communications systems requirement analysis, system design, development, testing, integration, implementation support and documentation services on mainframe, mid-tier and personal computer hardware/software platforms for Air Force and Defense Department customers.

Commercial Information Technology Product Area Directorate. This business line provides the best value available to any government organization for purchasing any of a wide range of brand name products that include desktops, laptops, servers, rugged portables and peripherals.

Customers can shop the virtual superstore at http://itsuperstore.af.mil/ and use their organizations' government purchase card.

The superstore also offers a federal employee-buying program through which federal employees may purchase commercial technology for home use using their personal credit cards at the same discounted rate.

Our plan

Ongoing initiatives support both our mission-essential tasks and strategic objectives. They will provide our customers with quality products and services at the best value and promote expansion of our business base, helping us remain competitive with the rest of the industry.

Our initiatives include better business discipline; controlling costs; developing new technologies and processes; merging



Futuristic technology insertion is demonstrated in Materiel System Group's Information Technology Application Center by "ITAC Bob." Using a head-mounted display and camera along with a wearable personal computer, workers can access required data through two-way voice communications and visual displays. (Courtesy photo)

activities; investing in people and web-enabling or automating wherever possible. Upgrading technology will improve timeliness, accuracy and accessibility of needed information.

Meeting future challenges

Several planned initiatives include:

The global combat support system, a set of common products, interfaces, capabilities, and services that runs such common services as messaging and security on all participant systems.

This provides better security, information assurance and interoperability, a consistent look and feel on different systems, and large cost savings, improving the speed and quality of information flow.

The Air Force portal, a web-based tool that provides secure, single log-on access to all information and mission applications Air Force members need to perform their daily jobs. It will draw data from sources that include public feeds, existing Air Force

systems and specifically developed web-based systems. The portal will improve access, convenience and knowledge-sharing, expanding the capabilities of every user by providing full-spectrum service from one's own computer.

The technical order concept of operations, a marriage of commercial-off-the-shelf hardware and software products, automates the acquisition, sustainment, management, distribution and use of technical orders Air Force-wide.

Automating the paper-based technical order system provides the most current information and drastically reduces problems with managing paper products.

It will give warfighters better configuration management and more efficient maintenance, resulting in a higher weapon system mission-capable rate.

Our test laboratories, providing state-of-the-art computing and a linked modeling and simulation system to rapidly test the latest technology to improve weapon system life-cycle acquisition, support and operational capabilities.

They can share resources and provide quick testing and insertion of new technologies into our systems at the best possible value.

The enterprise data warehouse, which will be a single

source of logistics information: state-of-the-art decision support. It will provide total visibility of all Defense Department assets in all parts of the system to improve ordering, tracking, repairing, contracting, transporting, status, relevant financial data and anal-

ysis at all levels. It will put the right information at the right place and time across the full range of military logistics.

The e-micropurchase initiative, which would automate small purchases (under \$2,500) made with the government purchase card using commercial-off-the-shelf "e-procurement" software. The desired results are standardized transaction records, updated catalogs and easy business rules and ease of use.

This initiative will reduce the cost of purchases and standardize tracking and documentation of transactions.

One call to information services is all you'll need to make to get the best information technology.

Vision: Air Force professionals providing the world's most respected combat support information systems, transforming data into knowledge for Air Force decision makers.



Ms. Kimberly Stoval, Mr. Arnie Jones and Ms. Jennifer Jones, working in the MSG Virtual Information Center (a 24-hour, 7-day a week user help desk), provide customer support assistance with hardware and software problems. (Courtesy photo)



Mission Essential Task: Develop, acquire, integrate, implement, protect and sustain combat support information systems for the Air Force and Defense Department customers.

- ☐ Meet or exceed operational standards for 75 percent of managed systems, products and services by fiscal 2002 and 90 percent by fiscal 2004.
- □ Drive accumulated operating result to zero annually.
- □ Develop methods, standards and criteria for rapid response to customer contacts by fiscal 2001 and implement the plan by fiscal 2002.
- □ Anticipate customer needs via technology push through 100 percent customer crosstalk at least annually by fiscal 2002.
- □ Sustain an agile work force through ability to fill customer manpower requirements for 95 percent Air Force working capital fund positions in each service level agreement period by fiscal 2002.
- □ Certify the work force by identifying all positions requiring certification by the end of fiscal 2001, ensuring 80 percent of people are properly certified in their positions by fiscal 2002.
- □ Reduce information services overhead as a percentage of total costs from 13 percent to 11 percent using the fiscal 1998 baseline by fiscal 2007.
- ☐ Maintain information enterprise availability by achieving a daily 98 percent system availability and performance by fiscal 2002.
- □ Recognize and respond to threats or attacks and system degradations. Achieve 100 percent detection rate by fiscal 2002.
- □ Complete 90 percent of evaluations providing answers about a particular technology in 30-45 days, and all in no more than 60 days by fiscal 2002.

Providing warfighters the right product, in the right place, at the right time

Maj. Gen. Paul L. Bielowicz Supply Management Chief Operating Officer

Il over the globe Air Force members prepare to fly, fight and win on any given day, and they must have tools to complete their individual tasks in order to do this. That's where the supply management mission area comes in, by ensuring Air Force warfighters have the parts they need to accomplish their missions: providing policy, guidance and resources to ensure spare parts requirements are filled in both war and peace times.

The supply management mission area is responsible for inventory management of more than two million items, including weapon system consumables and depot-level reparable spare parts managed by three Air Logistics Centers. Those centers are located at Tinker Air Force Base, Okla., Hill AFB, Utah, and Robins AFB, Ga.

In addition to managing parts, the supply management mission area provides a wide range of logistics support services. These services range from requirements forecasting to cataloging; provisioning to procurement; and technical support to data management and transportation.

The mission area's customers are the Air Force major commands, and include Air Force Materiel Command depot maintenance facilities, Air National Guard, Air Force Reserve, foreign militaries, contractors and other Defense Department agencies.

Of course, it takes money to provide services to these customers. The Supply Management Mission Area receives money through two distinct activities: the supply management activity group and the direct budget authority.

Like any retail store, the supply management activity group earns its revenue through sales to its customers. This is referred to as a working capital fund and is designed to break even over time. In contrast, the direct budget authority is funded with appropriations directly from Congress for specific programs and items.

Separate divisions

The supply management activity group is divided into two divisions. The first division, **the general supply division**, is responsible for the retail acquisition, storage and issue of items managed at the wholesale level by other services and government agencies. Typical items include consumable parts, bulk items and end items managed by the Defense Logistics Agency or General Services Administration and locally purchased items.

The second division, the material support division, is responsible for Air Force managed depot level reparable spare parts and Air Force managed consumable spare parts. The material support division also supports civilian and military personnel costs as well as overhead for the operation of the supply management activity group.

To support our vision, mission and mission essential task, we have identified nine objectives — four of which center on the



Master Sgt. Mike Smith, Hill Air Force Base, Utah, inspects a landing gear part. Hill is the single Air Force supply point for landing gear. (Photo by Master Sgt. Neil Werenskjold, OO-ALC Public Affairs)

mission area's ability to support its customers from an operational perspective.

Measuring our ability

To measure our ability to provide the right parts to the right place at the right time, we developed measures for each of these objectives. These measures are issue effectiveness, stockage effectiveness, logistics response time and backorder units.

Issue effectiveness is the number of times base supply fills a customer's order with items they already have divided by the total number of orders they receive. In 1998, this rate was only 56 percent. Since that time, we have raised it to 59 percent with our goal in 2006 to be 72 percent.

Stockage effectiveness is the percent of orders that base supply is able to satisfy with on-hand stock that base supply is authorized to have in stock. This is a key measure because it indicates how well we supply items for which the customer has identified a requirement. From 1998 through 2000, the stockage effectiveness rates have steadily improved from 66 to 70 percent, and our end goal is 83 percent in 2006.

Since supporting the customer is our goal, we developed the logistics response time measure. This is the average time, in days, it takes to satisfy a customer order that cannot be filled by base supply with on-hand stock. Since 1998 logistics response time has been reduced from 45 days to 37 days. The 2006 target is 23 days. The backorder measure counts the number of orders that cannot be immediately satisfied from existing inventory. By 2006 we want to reduce this to 121,000 units, and we are well on the way. Since 1998, the number has decreased from 615,000 units to 260,000 units in 2000.

The 25 supply chain managers at the three Air Logistics Centers are key to the mission area's success. Supply chain managers submitted their sequential goals that were rolled together to produce the mission area's annual goals culminating in the 2006 goals stated previously. If they reach their goals, then we

will attain our aggregate goals.

Each Air Logistics Center and supply chain manager must ensure they receive adequate cost authority within the working capital fund to achieve their goals for issue effectiveness, stockage effectiveness, logistics response time and backorders.

Likewise, the supply management mission area's customers

must be fully resourced for their portion of the supply requirement. If the customer doesn't have the funds to buy the parts, it doesn't matter if we have the parts. Linking the program and budgeting process of the Supply Management Mission Area and its customers is the mission of

Vision: Support an Expeditionary Air Force by providing spare parts in a timely manner.

Mission: Provide policy, guidance and resources to fill spare parts needs in war and peace.

Another major initiative aimed at improving the efficiency of our supply pipelines is the constraints analysis program — an on-going study of major constraints that reduce our support to the warfighter.

Using a readiness based methodology, we identified six major

Using a readiness based methodology, we identified six major areas that were affecting supply chain management effective-

ness: consumable support; component reliability; supplier management; workload planning; due-in from maintenance; and inventory management. While each of the six areas has been analyzed as an independent ele-

the Spares Requirement Review Board. **Forecasting requirements**

Improving procedures for forecasting valid requirements, budgeting for those requirements and executing that budget is instrumental in support of the warfighter. Beginning in fiscal year 2002, the supply management activity group will focus on budgeting for 100 percent of approved requirements, including non-consumption requirements. Also, the mission area will address adjustments as requirements change during the year. These initiatives will enhance our ability to capture the warfighter's true requirement.

Over the past two years, we have developed several national stock number-level analysis tools to identify and rectify inefficiencies in the supply pipeline. For example, the issue and effectiveness tool, developed by the Air Force Logistics Management Agency, located at Gunter Annex, Maxwell AFB, Ga., gives supply chain managers unprecedented visibility of issue and stockage effectiveness data. Similar tools have been developed for backorders, mission capable items and logistics response time. These tools provide managers with data they need to monitor their pipelines in an easy to use format.

ment, we recognized those constraints cross functional boundaries and interact with each other. Each element was viewed independently and in relationship to the other constraints to fully understand the impact they can have on warfighter support.

In addition to meeting the operational needs of our customers, we must also face the financial challenges of our business. While we aim to provide the "right product to the right place at the right time" we also have to remember to keep in mind the "right price." This is not always an easy task during times of increased costs and budget constraints. Our goal is to hold the rate of price increases of products and services to no more than the rate of inflation by giving our supply chain managers increased visibility of their costs.

Finally, we must address the shrinking workforce and infrastructure issues by working to match personnel and workload levels and ensuring our people have the skills and proficiencies needed to meet future mission requirements. With continued teamwork in these areas, the involvement of our contractors, the operational commands, and all facets of AFMC, we will ensure America's armed forces will always have support that is "second to none!"



Mission Essential Task: Provide and deliver reparable and consumable items (right product – right place – right time – right price)

- ☐ Increase AFMC retail issue effectiveness to 63 percent by the end of fiscal 2001 and 72 percent by fiscal 2006.
- ☐ Increase AFMC retail stockage effectiveness to 72 percent by the end of fiscal 2001 and 83 percent by fiscal 2006.
- □ Reduce the logistics response time of AFMC managed items to an average of 36 days by the end of fiscal 2001 and 23 days by fiscal 2006.
- □ Reduce AFMC backorders to 238,000 units by the end of fiscal 2001 and 121,000 units by fiscal 2006.
- ☐ Hold cost increases of mission area products and services to no more than the rate of inflation through fiscal 2007.
- □ Program for a net operational result of zero for each year in the Future Years Defense Plan, then execute each year to meet the programmed net operational result.
- \Box Improve mission requirements forecasting, budgeting and execution processes through budgetary adjustments and enhanced processes for resolving "in execution year" disconnects.
- □ Develop a fiscal 2005 supply management work force end state and determine the skills mix and proficiencies needed to meet the fiscal 2005 mission requirements.
- □ Size and configure the mission area capital infrastructure to support the SMMA mission and people at AFMC installations by fiscal 2005.

Ensuring AFMC's readiness during war and peace times

Maj. Gen. Paul L. Bielowicz

Depot Maintenance Chief Operation Officer

Then Air Force aircraft break down or need scheduled maintenance, the 21,000 people working at Air Force Materiel Command's depots stand ready to get them fixed, serviced and back into the air in minimal time.

AFMC is home to the Air Force's only three depot maintenance facilities. Our people do major overhauls and repair systems and spare parts while trying to meet or exceed required standards for quality, timeliness and cost.

In peacetime, we repair, overhaul and modify aircraft, engines, missile components and software to meet customer demands in the service's day-to-day mission.

Our efforts focus more during wartime or contingencies, as we surge repair operations and realign capability to support the warfighter's immediate need to have aircraft and spare parts ready for the fight.

Customers, products and services

Our single largest customer is the supply management mission area which generates about 44 percent of our revenue. The major commands, including the Air National Guard and Air Force Reserve, generate approximately 48 percent of our revenue. The balance of our work comes from the other services, other government agencies and foreign countries.

We overhaul the Air Force's airframes and engines and repair



C-130 Hercules aircraft, like this one from Ramstein AB, Germany, undergo programmed depot maintenance at Robins Air Force Base, Ga. AFMC's air logistics centers repair, overhaul and modify hundreds of aircraft every year as part of their mission essential task to repair fielded and emerging weapons systems. (U.S. Air Force photo)

missiles and ground electronic systems on a set schedule. The schedule is based on when each weapon system is most available. We also repair individual components field units send in – items that can't be fixed at the base level.

In addition to scheduled maintenance, AFMC depots provide an extensive software capability to develop or modify software

Depot



Maintenance



Mission Essential Task: Provide organic and contract depot repair capability for fielded and emerging weapon systems.

- ☐ Meet end-item delivery commitments 90 percent of the time by the end of fiscal 2005. Exchangeable delivery commitments will be based on the flow day metric.
- □ Technically compliant operations across all product lines.
- □ Reduce the average cost of operations from the fiscal 1998 baseline, after inflation and technical changes (work specifications and investments) by 8 percent by the end of fiscal 2007.
- ☐ Ensure new and existing weapon systems/technologies are considered during the biennial core assessment to retain a viable organic core capability in the future.
- □ Continue development, implementation and execution of partnering agreements to support sustainment strategies and integrate partnering agreements implementation methodology into the Depot Maintenance Strategy by the end of fiscal 2002
- ☐ Manage costs each year to ensure net operating result goals are met or exceeded.
- ☐ Drive accepted quality defect rates to .03 per exchangeable item and according to individually established model design and type model defect rates.
- ☐ Improve budget forecasting, budgeting and execution processes by forecasting within 3 percent of a total revenue, cost of goods sold, expenses and direct product standard hours produced versus center targets. Budgeting for 100 percent of new customer orders generated from the annual workload review.

used to operate weapon systems, as well as software designed for diagnostic purposes. And, our depots manufacture critical components required for parts that can't otherwise be obtained timely or cost effectively.

Finally, we store, regenerate and dispose of excess equipment for all the services at the Aerospace Maintenance and Regeneration Center at Davis-Monthan Air Force Base, Arizona.

The depot maintenance mission area owns and operates more than \$7 billion in facilities and equipment. Our 21,000 people sell more than \$5.3 billion in goods and services annually.

The AFMC depots account for \$3 billion, while the contract

program accounts for \$2.3 billion, using approximately 750 contractors.

Customer Support.

Our goal is to provide quality products and services to our customers, on time and at the lowest possible cost. In the aggregate, we've decreased the average depot maintenance air-

Vision: Provide the maintenance capability to support peace time operations or a crisis while maintaining the capability to rapidly support another major theater war. Build a professional maintenance work force to lead and support Expeditionary Aerospace and Joint Forces.

Mission: Repair systems and spare parts that ensure readiness in peace time and provide sustainment to combat forces in war time.

craft flow days every year since fiscal 1996.

While the total flow day average for the entire aircraft population is decreasing, airframes like the KC-135 and C-5 continue to have problems.

Some other aircraft incur additional flow days due to unforeseen maintenance problems and supply delays. We're working with suppliers, customers and the Air Staff to resolve these problems

The depot maintenance mission area significantly decreased overhead costs by closing the Sacramento Air Logistics Center at McClellan Air Force Base, Calif., and the San Antonio Air Logistics Center at Kelly Air Force Base, Texas. We expect to lower our operating costs 8 percent by fiscal 2007, after inflation and technical changes.

The environment. Since fiscal 1990, the depot maintenance environment has experienced many challenges. Public and private competition, privatization, closing the Aerospace Guidance and Metrology Center, McClellan and Kelly, along with consolidating workloads and manpower reductions have heavily taxed the depot maintenance community. However, these changes have created a very flexible and competitive work force.

In the future, we envision a much more stable environment that allows us to carry out this plan's objectives. However, the external and internal environments will continue to drive changes needed to further improve the mission area.

Mission essential tasks

When it comes to the AFMC mission, we'll support the command's vision and goals by focusing on providing capability for fielded and emerging weapon systems and quickly responding to user requirements contingency operations drive. We've identified nine objectives to help us achieve these goals. We've developed detailed strategic action plans for each one of these that focuses our efforts and milestones and guides our progress.

Core capability. The three remaining Air Force depots will maintain organic core capability. We'll conduct biennial reviews to determine the required capabilities to support core.

Realizing technology is ever evolving with new or improved weapon systems, the Air Force will make sure critical new technologies are infused into our depot capabilities. This will be done via the depot maintenance mission area long-term depot strategy and a corporate workload assignment process that's integrated into the acquisition and sustainment plans for new weapon systems.

The depots will continue to modernize to accommodate these new technologies, and existing technologies will be refreshed through the capital purchases program.

Workload alignment. The three depots will be sized to "core

plus." Core plus includes workloads required to support core capability as well as non-core capability. Examples are best value decisions, competitively awarded contracts, last source of repair, interservice workloads, and foreign military sales.

Workload at the depots is expected to stabilize

when workload transitions from the closing bases are completed. The depots are now "right-sized" and operating at 90 percent capacity utilization. However, capacity shortfalls exist in specific areas. The depot maintenance strategy, through a short-term and long-term plan, will address these shortfalls.

Distributing future organic workload will be based on the technology repair center Centers of Industrial and Technical Excellence concept.

Non-core capability workloads will be subject to best value assessments to make sure we use our dollars cost effectively. The private sector will be a primary repair source for commercial derivative workloads.

Financial performance. We'll continue to focus on reducing operations costs by improving forecasting techniques, streamlining financial processes, upgrading information systems and enhancing interoperability with the customers' and other functional areas' systems and processes.

People. During the past decade and a half, some 49 percent of the people needed to do depot maintenance have gone away, and restricted hiring has left our civilian work force significantly unbalanced.

Less than 10 percent of the force has 10 or fewer years of service. We've identified four initiatives to address these challenges — accession management; employee development; retention management and separation management.

Infrastructure. The goal is to make sure our infrastructure can effectively support AFMC's depot operations and customers now and in the future. The focus will be on how to make capital investments.

We will base investment decisions on supportability of core capability; sizing the depots to "core plus;" assurance of efficiencies and economies of scale; and minimizing capacity shortfalls while maximizing capacity utilization.

The depot maintenance mission area will also pursue partnering arrangements with industry to better use under-utilized areas within the depots.

Building the AF's technological foundation for global engagement

Brig. Gen. Paul Nielsen Science and Technology Chief Operating Officer

he Air Force Research Laboratory is charged with meeting the science and technology mission area objective: to provide the technological foundation for the Air Force vision of global engagement.

This full-spectrum laboratory is responsible for planning and implementing the Air Force's entire science and technology budget: basic research, applied research and advanced technology development.

Its nine geographically dispersed technology directorates and the Air Force Office of Scientific Research employ more than 5,000 people and invest around \$1.3 billion annually, about 2 percent of the Air Force budget.

In addition, AFRL receives approximately \$1.1 billion from customers. Of this, 80 percent is invested with industry and universities

AFRL's people focus their efforts in areas like Air Force core competencies and critical future capabilities. Our current emphasis areas are space, directed energy and information systems.

We also focus on revolutionary technologies that will improve capabilities or reduce ownership cost, including an increased emphasis on biotechnology, nanotechnology and information technology.

Customers, products and services

Our primary customers include the war-fighting commands and the Air Force Materiel Command product, test and logistics centers that acquire, test and sustain Air Force weapons systems. AFRL planners establish investment strategies and set priorities based upon the Air Force strategic plan and the Air Force modernization process.

The Air Force strategic plan's 14 critical future capabilities guide long-term science and technology and experimentation investment by identifying promising concepts and high-leverage opportunities.

In addition, the warfighters identify near-term technology requirements in their mission area plans. Together, these documents guide AFRL in developing technologies to support both present and future warfighters.

Our planning is done in conjunction with a variety of Defense Department and non-Defense Department technology agencies to ensure the best investment of Air Force resources.

Additionally, AFRL consults with customers on the technical effectiveness of technology and weapon systems investments. For technologies approaching maturity, we develop transition plans for the technology and obtain user commitment of technology transition through applied technology councils.

Objectives

To accomplish the science and technology mission essential







A few of the programs AFRL is responsible for are the airborne laser (top), virtual reality technologies (middle) and technologies that enable the exchange of global information (bottom). (AFRL photos)

task, we have established the following seven objectives.

Critical future goals. We will plan and program to achieve technology maturity for a set of critical future goals derived from the critical future capabilities. These programs focus on the highest-priority technology needs of the war fighters in the next three to five years.

Evolutionary and revolutionary technologies. To maintain our technological edge over potential adversaries, we must continue to take maximum advantage of evolving technological advances and to make these technologies more affordable.

But to maintain global dominance in today's world of technological proliferation, we must go further by developing technology that has yet to be imagined.

Thus, we will commit a portion of our funds to revolutionary technologies that will fundamentally change the way the Air Force conducts warfare.

Technology transition. We will partner with major commands to transition our technology to the warfighters. Senior leaders, through the applied technology councils process, will

ensure that the science and technology mission area is pursuing the appropriate prioritized technologies.

All advanced development programs for which the major commands show interest and support will be commissioned as advanced technology demonstrations.

Vision: We defend America by unleashing the power of innovative aerospace technology.

Mission: Leading the discovery, development and integration of affordable warfighting technologies for our aerospace forces.

including improved business practices, right-sizing science and technology facilities, land and capital equipment, and evaluating the number and types of military, civilian and contractor workers.

Science and technology funding level. To achieve a sufficient funding level, we will make known the value of the science and technology program to Air Force senior leadership and key decision-makers within the government, DOD, and industry.

Partnering with industry. We are committed to bringing the full strength of the nation's technical capability to bear on meeting Air Force needs.

To this end, we will leverage commercial technology and track available commercial products to identify who in industry is mutually interested in areas common to the science and technology mission area products needed to support Air Force weapon systems.

The Air Force mission requires complete success; second place is unacceptable. Thus, the bottom-line mission of the science and technology mission area is to provide the technology

that keeps our Air Force the best in the world.

This is a tremendous challenge that we will meet by focusing on customer requirements. Essential to fulfilling this mission is discovering, developing and integrating technologies that meet our customer's requirements in the

Science and technology program quality and relevance.

The Scientific Advisory Board, comprising scientific experts from throughout the country, provides an independent technical assessment of the quality and relevance of the Air Force science and technology program.

We will use Scientific Advisory Board suggestions and insight to provide concrete steps for continuous improvement to the science and technology program.

Reduce science and technology product support costs. We are taking aggressive action to reduce product support costs,

most cost-effective manner.

This means not only implementing modern business management practices to improve efficiency and productivity, but also leveraging limited Air Force resources through a partnership with industry, other services and other government agencies. We are confident that AFRL's people will meet these challenges.

AFRL is committed to defending America by unleashing the power of innovative aerospace technology to ensure that present and future war fighters have the best technologies available.

Science & 🙀 Technology 🌊

Mission Essential Task: Develop, demonstrate and transition affordable advanced technologies to achieve Air Force core competencies.

- □ Achieve technology set maturity to enable each of the approved CORONA critical future goals by fiscal 2006.
- ☐ Maintain 25-35 percent revolutionary technologies and 65-75 percent evolutionary technologies in the science and technology budget for warfighting capabilities through fiscal 2009.
- □ Partner with major commands to maintain advanced technology demonstrations to at least 50 percent of \$6.3 million funding as advanced technological demonstrations through fiscal 2009.
- □ Achieve the highest Scientific Advisory Board quality (1-3) ratings on at least 90 percent of the technical thrusts through fiscal 2009.
- □ Reduce science and technology product support costs from a baseline in fiscal 1998 of 24 percent to 18 percent of total costs by fiscal 2009.
- ☐ Increase Air Force level of commitment for science and technology.
- □ Partner with industry to develop methods/tools to optimize leverage of commercial technologies/products for Air Force science and technology initiatives by fiscal 2006.

Assuring system performance

Brig. Gen. (S) Perry Lamy
Test and Evaluation
Chief Operating Officer

merica's warfighters will be assured of the performance and military utility of their weapon and support systems because they have been rigorously tested and evaluated by the members of Air Force Materiel Command's Test and Evaluation Mission Area.

The mission area comprises more than 11,000 people overseeing national test and evaluation assets including complexes at Edwards Air Force Base, Calif., Eglin AFB, Fla., and Arnold AFB, Tenn. As we celebrate the 50th anniversaries of both Edwards and Arnold, people at these bases continue to manage this critical element of the development, acquisition and sustainment process.

The mission area brings the breadth and depth of expertise and test professionalism to meet test and evaluation requirements across the spectrum of systems and war-fighting environments, whether they are next-generation aircraft, electronic warfare systems, smart munitions or battlefield command and control technology.

Using our resources

Making productive use of available resources, our test experts plan and execute effective, affordable test programs, ensuring confidence in a system's level of maturity and performance as the system progresses through the development, acquisition and sustainment cycle.

The test and evaluation mission area has a diverse customer base for its two distinct business lines: **test and evaluation services** and **other operations services**.

Test and evaluation services support the complete system life cycle. These services range from support of basic scientific research and technology development, through testing for system acquisition, employment and sustainment, working as a team with our acquisition customers and the warfighters, to structure test programs



Smart weapons like Boeing's Joint Direct Attack Munition are tested at the Air Armament Center, Eglin Air Force Base, Fla. (Boeing courtesy photo)

to balance cost, schedule and technical risks.

Knowledge is the key

The product of test and evaluation is knowledge. This knowledge is used to refine designs, define system performance and assess operational utility so that our customers can make informed decisions.

While the Air Force constitutes a large majority of our test and evaluation customer base, we also support the other services, other government agencies, industry and foreign governments.

Other operations services, our second business line, provide air traffic control,

airfield management and weather services supporting flying activities at AFMC installations. Customers include AFMC and tenant flying units, as well as the Defense Department and civilian transient aircraft.

Operations services support

In addition, other operations services support the acquisition and sustainment of air traffic control and landing systems.

Our weather specialists not only provide forecasts and observations, but assess weather sensitivities which may impact the development, acquisition and sustainment of weapon and support systems.

Improvement focus

To continue delivering quality products and services and reshaping the mission area to meet our customers' future requirements, we have established seven strategic objectives to measurably improve performance of our mission-essential tasks. These objectives will posture the mission area to remain the test and evaluation supplier of choice.

As changes in the acquisition environment demand the mission area become leaner, we will rely on reengineering the test process and making greater use of technology to become more efficient and affordable, while maintaining our customer focus.

Changing structure

Comprehensive reengineering efforts are already underway to improve organizational structures, business management practices, scheduling systems and cost collection and accounting systems.

These will provide customers improved planning, test execution and cost visibility.

We will specifically pursue the greater employment of modeling and simulation in lieu of full-up operating environment testing.

While requiring an initial investment, this transition will reduce long-term costs and improve test efficiency. Our test and evaluation organizations will also work more as a team, internally, as well as in partnership with our test customers and suppliers.

Combining the objectives of developmental and operational testing and sharing resources is a critical improvement strategy.

The future of our mission area rests on critical infrastructure assets, our ability to provide the needed level of sustainment and modernization and our people. Our backlog of critical maintenance and repair continues to grow, while investment funding for future capabilities falls significantly below requirements.

Decisions will be made as to what constitutes our "core" facilities and capabilities, what upgrades they require and what technologies will be required to test future weapon and support systems. These decisions will provide the foundation for an integrated investment plan for tomorrow's test and evaluation infrastructure.

We will also make decisions to reshape our work force to ensure that we have the right numbers, skills and expertise in the future. These decisions will lead to dramatic changes in how we test, what we test and the extent to which we test, and may point to further reductions in capacity and reliance on other sources for mission execution and support.

Meeting future challenges

We will implement these changes in coordination with the warfighting commands and the acquisition and technology communities. As a mission area, we will face significant challenges over the coming years. We will respond with our best efforts to meet these challenges and sup-



Mr. Paul Buckner, a machinist at Arnold Engineering Development Center, Tenn., checks components on the F110-GE-132 engine during installation. The engine, used on Block 60 F-16 aircraft, arrived at AEDC in January and is scheduled to undergo more than 220 hours of altitude testing at Arnold. (Photo by Mr. Gary Barton, AEDC)

port AFMC in meeting its critical mission. Our strategic objectives define our path for improvement.

These objectives build on our reputation for test and evaluation excellence and ensure we continue to meet customer requirements with quality products and services, take care of our people, sustain and modernize our aging infrastructure and develop the capabilities and tools to test tomorrow's weapon and support systems.

Vision: Supplier of choice for thorough and realistic test and evaluation of weapons and support systems.

Test &



Evaluation



Mission Essential Task: Provide timely, accurate and affordable knowledge and resources to support weapons and systems research, development and employment.

- ☐ Identify category 1 deficiencies in tested systems prior to certification for readiness for operational test by fiscal 2004.
- ☐ Meet 95 percent of commitments for test and evaluation information within quality, cost and schedule agreements by fiscal 2005.
- □ Reduce the cost of test overhead by 3 percent per year to total 15 percent by fiscal 2005 (fiscal 2000 baseline).
- □ Reduce government costs, expand capabilities and improve products and services through the implementation of partnerships or other cooperative agreements by fiscal 2005.
- □ Develop integrated roadmaps in concert with Air Combat Command, Air Mobility Command, Air Force Space Command, Air Force Special Operations Command, Air Force Operational Test and Evaluation Center and NASA, providing the test and evaluation capabilities for future systems by fiscal 2004.
- □ Dedicate resources for the sustainment and modernization investment to provide efficient and cost effective capabilities across all test and evaluation product areas by fiscal 2004.
- ☐ Provide, sustain and modernize air traffic and weather support for AFMC flight operations.

Maintaining the Command's communication infrastructure

Ms. Debra Haley Information Management Chief Operating Officer

The people of the information management mission area are responsible for AFMC's command-wide communications infrastructure, which includes voice, video and data communications.

All AFMC mission areas, customers, warfighters and business partners use this network infrastructure to access their telephones, data systems and the Internet; to communicate, via email, with their customers and to access other information to perform their daily tasks. This infrastructure is known as the AFMC information enterprise.

AFMC's information enterprise is vital in achieving the Air Force core competencies of agile combat support, rapid global mobility and information superiority. Information superiority is developed through knowledge management, the transfer of individual knowledge to organizations across boundaries, time and space. It enables sharing of information, encourages learning, fosters innovation and collaboration and provides information to help our leaders make informed decisions. Knowledge management links employees, customers, partners and the warfighter with the information they need to perform the job or accomplish their mission.

One of our most critical objectives in achieving knowledge management is providing AFMC with a secure network infrastructure and tools. The information enterprise is the critical foundation for enabling knowledge management across the command. In providing the information enterprise we must maintain and upgrade the hardware, provide network security (firewalls, anti-virus software and vulnerability assessment tools) and meet Air Force standards for interoperability and effective global communication across the Defense Department.

The network operations security center is AFMC's front-line defense for network security. As Gen. Michael Ryan, Air Force chief of staff, said, "Our information systems and networks go to war with us and, because they are part of the fight, we must treat them as weapon systems." To better manage this weapon system, the information management mission area has consolidated AFMC's network centers into a "network operations security center-centric" environment that will give us the ability to detect network vulnerabilities 24 hours a day, seven days a week from a central AFMC site.

A major focus at every Corona meeting is whether all Air Force major commands are performing business electronically, and a major information management mission area objective is to ensure AFMC has the network infrastructure and tools in place to do just that. The Defense Department, Air Force and AFMC vision for e-business is to have an enterprise-wide electronic environment by 2010, where best business practices and enabling technologies are used to facilitate the efficient



Mr. Tyler Chronaberry, an Air Force portal administrator for AFMC Communications and Information directorate, works on a network server. (Photo by Ms. Estella Holmes, AFMC Public Affairs) exchange of business information.

Through effective use of the Internet, the information enterprise removes traditional barriers of geography, organizational structure and even time of day to enable easy, rapid, secure access and communication between and among people and systems to perform daily tasks.

This is the pillar for the electronic AFMC vision, described in AFMC 2020: "an e-business approach...is our future...Empowered employees using intelligent systems will be the norm, as the volume of information required for decision making will overwhelm traditional approaches. Task forces and 'virtual organizations' linked electronically will become the standard."

Customers, products and services

Our customers consist of people in AFMC and Air Staff headquarters, warfighters, commercial users and the public sector. They are located worldwide (more than 120,000 in AFMC alone) and utilize the AFMC network to extract such information as asset management, depot maintenance, transportation and other related information needed to perform their mission.

Our products and services must provide the latest technological advances to provide our customers the tools for effective decision-making. Our business lines are information technology, information management and communications operations. These product-line initiatives equip and sustain our customers with data integrity and network security, provide reachback capability with the latest technology and resources and provide on-line support.

Our plan

As we pursue AFMC's knowledge management and "e-AFMC" goals and objectives, we will identify processes and tools to facilitate global data sharing between AFMC and its business partners.

The information enterprise, in an "enterprise-centric" environment, will be the enabler for e-AFMC (Figure 1.) The advantages to the customer of AFMC's enterprise-centric environment will be a more reliable, accessible and responsive environment that is customer focused.

The most critical element of providing the e-AFMC environment is a strong AFMC network infrastructure that will support mission area, customer and wartime applications. We must develop and maintain an adequate information enterprise network infrastructure through strategic upgrades, a directory of approved network users and services and corporate tools to manage the networks.

Perhaps the most exciting example of a technological advancement that will support key e-AFMC processes is the Air Force portal. The Air Force portal, introduced at the Fall Corona 2000 gathering of the chief of staff and the commanders of all Air Force major commands, quickly and fundamentally changed the business landscape.

Our enhancements to the Air Force portal will be the development of the AFMC channel. This will provide war fighters the ability to view information needed to do their jobs, regardless of which system manages that information. This means a maintain-

er, stationed anywhere in the world, will be able to log onto a computer, check e-mail, find out the status of parts ordered and even find the takeoff time for the aircraft needing those parts. All of this will be accessi-

ble with nothing more complicated than a Web browser loaded on a desktop computer.

The information management mission area plays a critical information assurance role in developing the AFMC channel of the Air Force portal. Our operationalizing information assurance

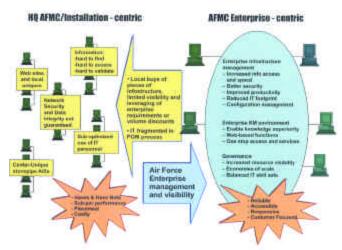


Figure 1 shows the information enterprise, in an "enterprise-centric" environment, as an enabler for e-AFMC.

plan includes several protection enhancements to the information enterprise that will further place us in the best position to create a robust security environment to protect AFMC communications and e-business transactions using the Air Froce portal.

Meeting future challenges

AFMC and the information management mission area face a future of rapid technological change. In order to meet our customers' communications and information demands in the future, we must be proactive in providing cost-effective services and a good basic network infrastructure capable of supporting AFMC's

future information technology demands.

Our future endeavors will be more challenging as information technologies evolve. The people in the information management mission area will step up to

these challenges by maintaining the highest level of communications and information standards required by our customers to achieve the AFMC mission and the Air Force vision of global vigilance, reach and power.



employees.

Mission Essential Task: Provide secure, reliable, interoperable communications and information services/access anytime, anywhere to AFMC customers, partners and employees.

Vision: Provide superior enterprise-wide elec-

tronic communications and information services

access to AFMC customers, partners and

- □ Right-size infrastructure to provide one-stop communications for voice, video and data. Complete two bases with industry partners by end of fiscal 2006 and all AFMC bases by end of fiscal 2009.
- ☐ Maximize efficiency and performance, and reduce overhead by combining/modernizing/reengineering of information management infrastructure as per Corporate Architecture and Performance Standards by end of fiscal 2006.
- □ Provide infrastructure and tools for AFMC implementation of the Air Force Information Enterprise. Facilitate eBusiness, eCommerce, eProcurement; and the knowledgable worker by end of fiscal 2006.
- ☐ Fully train and certify all Network Control Center personnel Work Group Managers and Functional System Administrators as per AF requirements, by fiscal 2004. Complete 90 percent of core tasks by end of fiscal 2001.
- □ Operationalize Information Assurance to ensure AFMC networks are operationally secure and proactively defended, 24 hours a day, seven days a week by end of fiscal 2006.

Delivering behind-the-scenes support to keep AFMC's bases running smoothly

Vision: A motivated team of professionals...

the essential foundation underlying AFMC's mis-

Brig. Gen. David M. Cannan Installations and Support Chief Operating Officer

The Installations and Support Mission Area provides basic "city" services at Air Force Materiel Command installations. We also equip and train the command's combat support forces for warfighting commanders-in-chief worldwide. Those responsibilities are summed up in two of the command's mission essential tasks — the installations and support mission essential task, which we own, and the combat support mission essential task, for which we are the com-

mand's primary provider of military personnel.

The installations and support strategic plan is our roadmap for meeting those responsibilities in the years ahead. The basic tasks are essentially the same as they've always been — the behind-the-scenes nuts and bolts of keeping a base running.

But the environment in which we must perform those familiar tasks looks to be markedly different from years past, leading us to a new, higher-level challenge: learning how to make the most effective use of our streamlined work force, new processes and new organizational structures, given fewer resources and an aging infrastructure.

ating support from fiscal 2003 through 2007 and a virtual standstill in recapitalizing our infrastructure. To help ease the burden, we'll continue to emphasize strategic solutions, such as competitively sourcing our own functions, privatizing utilities and housing, studying ways to right-size our

infrastructure, and implementing the mission area approach to

For the foreseeable future, support operations will be required to consume an even smaller portion of the budget so that the Air

Force can pursue long-term, big-picture requirements: moderniz-

ing weapon systems, enhancing space capabilities, recruiting and retaining a world-class work force, and continuing the transfor-

Force. We face decreases in programmed funding for base oper-

mation from the Cold War structure to an Expeditionary Air

managing costs and performance.

While each of these has proven its value, none are mature or completed processes, and we intend to develop them

further to reduce costs. A special concern is that our competitive sourcing studies have increased the complexity of our overall work force even while reducing the size — we now have a mix of in-house and contracted functions, different at each base.

Housing and utility privatization efforts are just getting underway. Infrastructure right-sizing initiatives require up-front investment to generate savings but must compete for scarce resources.

Installations

& Support

sions and people.



Installations and Support Mission Essential Task: Provide base support services, property management and environmental protection at AFMC installations.

Objectives

- □ Achieve an infrastructure condition index of 72 by fiscal 2009 and an infrastructure condition index of 75 by
- □ Provide base support services at standard level annually.

Combat Support Mission Essential Task: Provide the trained and equipped expeditionary combat support forces and capabilities to meet worldwide taskings.

Objective

☐ Identify required contingency response training for all Unit Type Code and non-Unit Type Code tasked military personnel, identify training shortfalls, and build a plan to correct deficiencies by Sept. 30, 2001. Program resources in the fiscal 2004-09 program objective memorandum.

Our mission area processes have helped us more accurately program and allocate resources, but we must improve the consistency of our services across the command and our ability to predict and adjust performance levels relative to planned funding.

We also need to make the tools we use more relevant to the employee performing our tasks and simplify the data gathering and reporting methods used to track performance. Our strategic plan will help us make progress across all these fronts.

Customers, products and services

Our primary customers come from the organizations that

carry out AFMC's unique missions and those that depend upon the myriad of base services that contribute to their quality of life — military and civilian employees, contractors, tenants, family members, retirees and others — a customer base of more than 150,000 people.

We deliver 63 products and services through three business lines: support services, property management and environmental management.

Services includes resource and force protection, personnel management, food services, lodging, fitness, recreation, child care, youth services, chaplain services, supply and transportation services. Installation staff functions such as safety, comptroller, contracting, legal, intelligence, inspector general, history, plans and programs and public affairs round out support services. Property management includes facility maintenance and operations, housing, utilities, fire protection, disaster preparedness and explosive ordnance disposal. Environ-

mental business line covers cleaning up past environmental problems; helping other organizations both maintain compliance with current laws and reduce or prevent pollution; and overseeing installation efforts to conserve natural and cultural resources.

Our plan

We have two primary strategic objectives under our installations and support mission essential tasks to focus the struggle for resources. The first is to **improve facility condition**. We use a numeric index to track the overall health of our facilities and utility systems. An index of 75 (out of 100) represents the outcome from the minimum facility investment required to sustain the mission. After several years of improvement, we peaked and have been gradually declining since 1997.

The index is currently 59 with a downward trend. Our objective is to reverse this trend and raise it to 72 by fiscal 2009, and

to 75 by fiscal 2012. In addition, separate objectives under the command's infrastructure enabling task are designed to enhance the configuration and management of infrastructure across all mission areas.

The second broad strategic objective is to **provide support services at the desired standard of quality**. Each of our base operating support products and services has performance criteria, with varying output levels ranging from minimum (bare-bones, with no reinvestment in new equipment or technologies) to standard (meets all requirements and makes appropriate investments

for the long term). Our objective is to advocate for and secure adequate resources annually to deliver each service at the standard level of output.

Other objectives address consolidating separately-contracted functions where efficiencies can be realized, simplifying our management tools and processes, standardizing performance levels of individual service contracts, reducing costs and improving the quality of products provided to our customers.

Changes in the way our military forces are organized and tasked for deployment are creating new requirements for home-station preparation and training. Deployable forces are typically assigned to a team with specific preplanned capabilities, known as a unit type code.

As our competitive sourcing processes wind down, our military work force stabilizes, and the service fine-tunes the Expeditionary Air Force concept, we must ensure our preparations and training are

current and appropriate. We've identified a strategic objective in this area to meet the challenges of the Expeditionary Air Force.



Continued pressure to reduce costs will challenge our mission area to find more efficient ways to get the job done. We will need to eliminate aspects of our operations that don't provide sufficient value or are no longer affordable.

Fortunately, customers can expect high levels of service in areas that depend primarily on our motivated and professional work force, which is expected to remain stable. However, unless there is realistic budget relief, they should expect to experience delays or lower quality service in areas that are heavily dependent upon new equipment or consumable supplies and a work place environment that continues to deteriorate more rapidly than we can sustain it.



Firefighters and security forces personnel provide critical behind-thescenes base support services at AFMC installations. (U.S. Air Force photo by Staff Sergeant George F. Thompson Jr.)

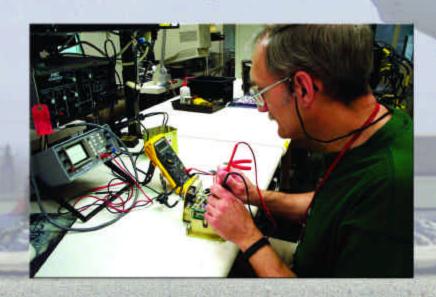
AFMC Vision

The recognized leader for equipping and supporting America's aerospace force -- the warfighter's first choice



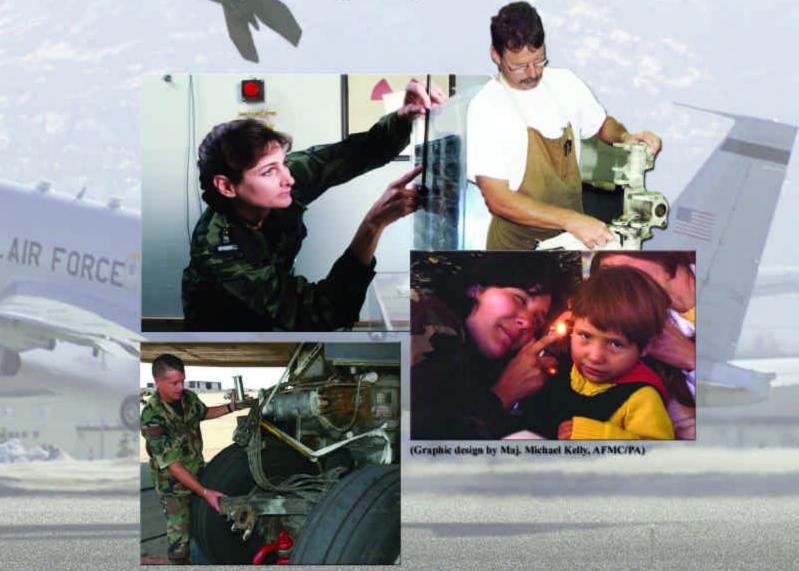
Mission

To develop, acquire and sustain aerospace power needed to defend the United States and its interests -- today and tomorrow



Goals

Satisfy our customer's needs in war and peace
Enable our people to excel
Sustain technological superiority
Enhance the excellence of our business practices
Operate quality installations



People — AFMC's most important resource

Lt. Col. (Dr.) David Arreola Chief, YOFAM/Quality of Life

In the Air Force Materiel Command we recruit the individual, and retain the family. This simple statement underscores the crucial role families play in the decision to remain in the military or as an Air Force civilian employee.

We use "family" in the broadest sense of the term: as a group of people working toward common goals, with a mutual regard and concern for one another. This definition includes military members and retirees, civilian employees, members of their immediate families and contract workers.

The definition also demonstrates why we incorporated the new AFMC people-enabling task and its objective. We want to create an environment where individuals and their families feel valued and respected.

A proactive approach

To create such an environment, we must have initiatives to include all of the "AFMC family." We want to be proactive: not just to react to problems, but have the ability to prevent problems. Finally, we want to be sure AFMC community members are aware of all quality-of-life programs and services that benefit them.

The people-enabling task meets all three criteria. Establishment of organizational health centers and employee assistance programs, increasing awareness of existing services and benefits and increasing adaptive behaviors assist people in meaningful ways. A healthy work force and workplace environment increases productivity, worker satisfaction and retention.

Our plan

Our plan is simple. To help our organizations, whether military or civilian, we are establishing organizational health centers. These centers will provide assessments and action plans to small work units, squadrons or entire directorates.

Credentialed mental health providers at each center will assist with the full gamut of civilian mental health issues, from suicidal employees to mental health consultation for supervisors.

The centers will serve as liaison and contract manager for employee assistance programs. These programs will provide our civilian employees access to confidential counseling for work and personal problems that affect job performance.

We will strengthen existing strategies and develop new ones to create an environment that helps prevent problems and encourages healthy behavior. These strategies include methods



Deployments are a part of life for Air Force members like this airman who says goodbye to his girlfriend before deploying to support operation Northern Watch. AFMC's health centers will help members cope with the stress associated with such deployments. (U.S. Air Force photo by Mr. John Sidoriak, Jr.)

to increase adaptive behaviors and decrease self-defeating ones. Emphasis is placed on suicide prevention and continued training and intervention.

To ensure AFMC members are aware of all the quality-of-life services available to them, we have a plan to increase awareness through the use of user-friendly Web sites and paper copies of resource guides. These will be created and distributed at all AFMC installations and will give anyone quick and easy access to pertinent information that will affect them and their family members.

Enabling Task: To create an environment where individuals and their families feel valued and respected.

- ☐ Implement a program beginning in calendar year 2001 increasing focus on individuals and families to improve quality of life for the work force.
- □ Establish a plan by end of calendar year 2001 to fully implement labor and management partnership principles, goals and objectives across the command.

Additionally, AFMC and the American Federation of Government Employees Council 214, AFL-CIO, are strengthening ties and have formed a partnership based on a simple, but important vision — labor and management working together creating and sustaining an environment to take care of its people so they can take care of the mission.

Meeting future challenges

Changes and uncertainty, accompanied by A-76 studies and reengineering efforts often take a toll on morale and increase job-related stress. Implementing these objectives will help foster an environment where people feel valued and respected.

The organizational health centers and employee assistance programs will give the command's work force the resources to meet future challenges. Likewise, working to increase adaptive behaviors across the command will help people learn a larger repertoire of appropriate responses when faced with difficulties.

Raising awareness of current benefits and services across the command will help people find the information they need to prepare them to meet future challenges.

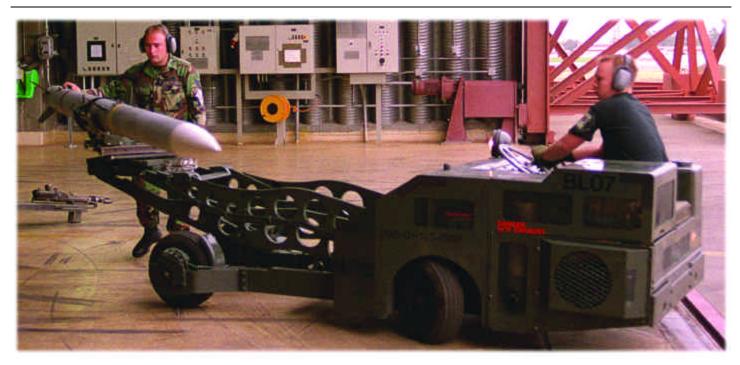
Important too, with the command-level Partnership Council and local councils at most AFMC bases working to make the partnership concept work, future challenges will be met with the principle of respect for all workers, common interests and shared problems, open sharing of information and trust in each other as equals.

Gen. Lester Lyles, AFMC commander, defines "family" as a group of people working toward a common goal, with a mutual regard and concern for one another. This includes military members of all ranks married or single — civilian employees of any grade, and members of immediate families, along with contract workers and their families. AFMC "family" members include: (Top) Mr. Ronnie Price, Tinker AFB, Okla., unloads cargo from a freight truck to a line of co-workers ready to label, sort and send the materials on their way. (Photo by Ms. Margo Wright, OC-ALC) (Middle) Gen. Lyles welcomes 61 new members into the Air Force family during a recruiting event at Wright-Patterson AFB, Ohio. Gen. Lyles administered the oath of enlistment. (Courtesy photo) (Bottom) The Air Force Research Laboratory's Rome Research site honor guard gets ready to march in the Honor America Days parade in Rome, N.Y. (Courtesy photo)









Staff Sgt. Jay Jarvis (left) and Senior Airman Brian Warfel transport an AIM-120 Advanced Medium-Range Air -to-Air Missile for loading onto an F-15C Eagle at Incirlik Air Base, Turkey, during Operation Northern Watch. Northern Watch is the coalition enforcement of the no-fly-zone over Northern Iraq. Sgt. Jarvis and Airman Warfel are weapons load crew members attached to the 493rd Expeditionary Fighter Squadron at Incirlik. (Photo by Staff Sgt. Rhonda Brown-Strong, USAF)

Supporting the warfighter across the range of military operations

Maj. Gen. Todd Stewart

Director

Plans and Programs

The objective of the expeditionary combat support is to equip and sustain the warfighter with "reachback" capability to the latest available technology and resources and a

secure infrastructure to provide on-line support across the range of military operations.

Our plan

Delivering timely decision support tools to the warfighter is the challenge

for accomplishing the AFMC expeditionary combat support enabling task strategic plan.

Our plan focuses on meeting essential, wide-ranging information requirements for time-critical decision-making to prosecute the warfighting mission.

We are committed to establishing infor-

mation requirements that span the range of military operations. We will identify where AFMC combat support information processes begin and end, and focus on information areas in order to enhance the warfighters' effectiveness. We will assimilate a comprehensive and meaningful set of information requirements, including user-defined requirements, legacy data and systems, and studies and analyses.

With fully integrated data and information systems, the warfighter will no longer be constrained by specialized "stovepipe" systems.

Maj. Gen. Todd Stewart, Plans and Progams director

We will define opportunities to automate an AFMC area of information operations, but we will not automate for the sake of automation. We will model information processes to produce the best decision support systems and support on-the-spot decision-making.

We will leverage data warehousing and portal technology to create seamless information retrieval and quantify our information transmission requirements, to forge and justify increased communications bandwidth.

With fully integrated data and information systems, the warfighter will no longer be constrained by specialized "stovepipe" systems. Data integration and integrated

> information will coalesce, enhance and deliver AFMC warfighting decisions. Implementing online reachback support to provide and deliver repairable and consumable items;

and providing online reachback management information systems support for quick response to depot level maintenance operations will be formidable.

The latest technology

The deployment of newer and more capable global communications and infor-

mation technologies, on par with the latest technology will challenge our best acquisition strategies.

The complexities of information systems integration will be highlighted when we field management information systems to track and report the status of trained and equipped AFMC expeditionary combat support forces, and management information systems for tracking and reporting contingency response training for all non-Unit Type Code tasked military personnel.

It will require nothing less than our best efforts; and will stress our ability to deliver timely, accurate information. Testing and implementing secure, reliable, interoperable communications and information services and systems to support expeditionary combat support operations must be done on a continuum.

Return on investments

Today, we use dollars programmed for technology enhancements to repair stovepipe information systems doomed for failure. Implementing the AFMC Expeditionary Combat Support Enabling Task Strategic Plan will enable a substantial and quantifiable return on our investment by fielding processes and capabilities for expeditionary combat operations.

We are confident we can normalize and field processes and capabilities for expeditionary combat operations—but we are not at all sure about the vulnerabilities; nor are we sure whether programmed dollars should be diverted to protect U.S. military information operations from external, as well as internal "cyber" attack. These are challenges we must meet and overcome.

KC-135 and KC-10 aircraft like these, participating in operation Deliberate Force, receive depot maintenance at Tinker Air Force Base, Okla. (U.S. Air Force photo)



Enabling Task: Develop, organize and field processes and capabillities that support and align with the mission of the expeditionary forces.

- □ Equip and sustain the warfighter with pre-positioned war reserve material capability to ensure time-definite delivery of required resources by July 2002.
- ☐ Ensure Air Force Materiel Command surge planning tools operate efficiently in a classified systems environment to support Expeditionary Aerospace Forces by September 2002.
- □ Equip and sustain the warfighter with reachback capability to provide online support across the range of military operations by December 2002.

Arming leaders with the right planning tools

Maj. Gen. Mike Wiedemer Director, Requirements

escribing how the Air Force Materiel Command will integrate its analytical, planning and technical strengths to provide senior Air Force decision makers with detailed systems options is the command's Strategic Assessment Enabling Task plan's focus.

This capability will be a new command capacity. Development planners previously managed many of these integration capabilities. But they've been allowed to waste away during the past several years, so Gen. Lester Lyles, AFMC commander, has made development planning a major AFMC initiative.

This initiative will match needs and desired capabilities with technical solutions and opportunities and programs and resources to acquire and sustain force structure. It will also provide the critical front-end analysis that enhances successful acquisition and sustainment.

Working hand in hand

Strategic assessment is a complementary process to development planning. They work hand in hand. Strategic assessment is the broader, more general approach that enables the development planning community to find out what the acquisition environment needs. The command's experts do this by collaborating among several highly specialized AFMC communities — science and technology, research and development, modeling and simulation and studies and analysis.

Each of these communities has remarkable talents and brings extraordinary value to the war fighter. However, they've tended to work in stovepiped worlds and the full potential of their integrated and optimized contributions have yet to be

realized. The SA Enabling Task Strategic Plan hopes to take those stovepipes away and describe how AFMC will integrate processes to provide analytical support to decision makers.

Important elements

Studies and analyses have always been important elements of Air Force research, planning and development, and AFMC has many analytical centers of excellence. Studies and analyses have historically been focused along narrow lines like a weapon system or mission area. This approach was appropriate to support planning and programming done to replace a weapon system or to support a specific mission area.

Experts at the Air Force level are implementing process changes to drive planners to a "capabilities-based" construct called the Air Force Resource Allocation Process, or AFRAP. This will be supported by end-to-end analysis.

Integrating processes

The Air Force Resource Allocation Process was designed to improve and more fully integrate the processes and products that bring Air Force capabilities to the fight. AFMC is expanding its strong but small analysis capability to refine its current processes and align with and support AFRAP.

Specifically, AFMC will establish a development planning organization to manage "system of systems studies" to provide better crosscutting, horizontally and vertically integrated analytical support for the Air Force. These studies will be accomplished by reaching back to the AFMC centers, Air Force Research Laboratory and industry and working with the Air Staff and major command analysis organizations.

Measures of merit for effects-based capabilities will provide increased war-

fighter value in options and alternatives. Traditional stovepiped process barriers within AFMC and the Air Force will give way to capability-based processes.

Initiatives

How successful these processes will be depends highly on technological advances in collaborative environments and modeling and simulation. Two initiatives that are critical enablers for this new analysis organization are Simulation Based Acquisition and the Information Resource Support System.

The Simulation Based Acquisition vision is an acquisition process where the Defense Department and industry are enabled by a robust, collaborative use of simulation technology that's integrated across acquisition phases and programs. Information Resource Support System is the Air Force approved and designated database for all planning, requirements and programming activities.

It's a flexible, data centric, processindependent system that will be a powerful tool for sharing data as required under this plan. It'll also overcome the difficulty of distributing timely information to the development team and help solve interoperability issues that confound developers and operators today.

The future

This new AFMC development and planning organization will be very small and will leverage the organic and contractor capabilities at other locations. It will take advantage of recent and future improvements in information technology.

AFMC's development planning capacity will grow slowly during the next few years. Ultimately, a more robust development-planning cadre armed with simulation technology will greatly enhance the potency of warfighting capabilities the command has developed and supported!

Enabling task: Provide independent assessment of systems options at the Air Force and higher-headquarters levels through science and technology, research and development, modeling and simulation and studies and analysis.

- □ Determine AFMC's role and analysis capability in providing future Air Force capabilities.
- \Box Build and demonstrate an initial integrated capability to analyze technology to influence the composition of the effects-based vision force by fiscal 2002.
- ☐ Expand strategic assessment capability to impact the fiscal 2005 Quadrennial Defense Review by fiscal 2003.

Changing paradigms to improve efficiency and reduce costs

Maj. Gen. Everett Odgers
Director, Financial
Management and Comptroller

Improving Air Force Materiel Command's financial processes, reducing costs and allowing AFMC to deliver its products and services more efficiently is why the command's financial management enabling tasks strategy plan was created.

The plan was put into motion when, in the 1999 Strategic Plan, command leaders incorporated our vision of designing a way to make researching, developing, testing, acquiring and supporting the Air Force a model of effectiveness and efficiency. In our search for a solution, we determined the command would no longer focus on managing budgets, but on managing costs.

Our number one goal now is for "each mission area to improve efficiency and reduce the cost of their products and services cost through fiscal 2009." This is a real paradigm shift from the past where success was measured in terms of how

much money you could gather each year.

We expect to rebuild financial management culture through implementing enabling task strategic objective action plans. New technology will help meet customer needs while new cost accounting systems will focus on output costs.

Having a standard set of financial performance measures will provide a comprehensive corporate picture of cost and performance. AFMC will have Chief Financial Officer Act compliant financial statements. The command's increased and improved cost analysis capabilities will support a more cost-oriented climate. Financial information will be meaningful because it will be useful, relevant, timely and reliable.

We've aligned our goals to provide financial operations and management of AFMC resources to support the command's mission and to support the mission areas in their quest to improve efficiency and reduce their product and services costs. This plan will challenge all of us to be more effective and efficient, focus on our external customers, provide decision makers with the information they

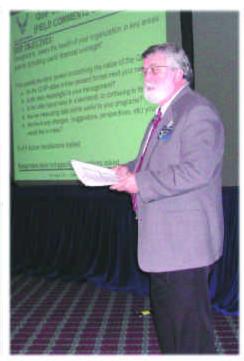
Enabling Task: Provide financial operations and management of AFMC resources to support the command's mission.

Objectives

- ☐ Field a standard set of financial performance measures to provide a comprehensive corporate picture of cost and performance.
- ☐ Field cost accounting systems with open architecture for mission areas to focus on costs of outputs by fiscal 2003.
- ☐ Increase and improve cost analysis capabilities for the Command by fiscal 2004.
- ☐ Provide Chief Financial Operations compliant financial statements for AFMC by fiscal 2004.

need, and give our "stock holders" insight to AFMC programs and spending.





Above: Mr. Terry Keithley, Mr. David Spencer and Mr. Joe Wise, AFMC Financial Management, discuss a new managerial cost accounting solution. (Photo by Ms. Estella Holmes, AFMC/PA) Right: Mr. Jim Dodson, Edwards Air Force Base, Calif., briefs attendees at the Financial Management 2001 Conference at Wright-Patterson AFB, Ohio. (Courtesy photo)

Rebalancing AFMC's work force

Col. Owen Dugan Deputy Director Directorate of Personnel

edicated and capable employees, both military and civilian, are the keys to this command's ability to successfully accomplish current and future missions. However, following a decade of downsizing with limited opportunity to refresh our civilian force, it is estimated that by 2005 more than 60 percent of that work force will be eligible for retirement.

As employees retire, there are few trainees in the pipeline being readied to replace them. We find ourselves in a situation where we need to rebalance the skills of our current force to meet the increasingly technical focus of our missions at the same time we replace workers, all in an environment of tight labor availability. The lack of qualified workers is especially acute for our technology focused career fields such as engineering and information technology — and impacts our ability to recruit and retain our military force as well as our civilians.

Our plan

The Human Resources Enabling Task reflects that the command must invest heavily in the health of our total force to ensure our ability to execute future missions. We have identified a number of initiatives that will help us respond to work force challenges, divided into four major categories: accession management, employee development, retention management and separation management.

The Human Resources Plan addresses the fiscal, legislative and cultural barriers that must be eliminated to attract and retain the types of employee we need. "One of our highest priority concerns is the need to obtain legislative relief from the current antiquated external hiring system, which does not allow managers to react quickly to candidate interest in an Air Force career, said Ms. Polly Sweet, human resources division chief. "Funding to allow us to use currently available recruitment and retention tools, such as bonuses, repayment of student loans and increased salary levels for our engineers is an important area of focus."

The plan includes a provision to develop and deploy management tools to provide employee feedback on work place environment and giving managers access to crucial demographic data, charting progress and identifing areas of concern. Two such tools currently in the development phase are the command human resources intelligence tool and web-based entrance and exit interviews.

"We plan to use the entrance interviews to find out how we can recruit new candidates more effectively, as well as to see if new employees are being given the training and experiences they need," said Ms. Donna Williams, a member of the command's work force shaping team. "The exit interviews are a way to find out what our retention challenges are, so we can refine our action plans to correct the problems we identify.

On the military side, our plan focuses on the need to address officer and enlisted shortages and retention as well as the need to recruit more effectively and to focus on career development.

Meeting future challenges

Ultimately, we need a command force that is balanced by age, years of service, gender and diversity. The force will be highly educated, technologically literate, multi-skilled, and capable of solving complex problems creatively. They will be offered frequent opportunities to refine



Jet engine mechanics Mr. Wade Waller, left, and Mr. JasonChastain, right, are part of a team finishing a TF33-P100 engine at Tinker Air Force Base, Okla. AFMC is looking for new employees to fill positions left vacant by a decade of downsizing. (Photo by Ms. Margo Wright, OC-ALC)

and update current skills, as well as developing new ones.

Our supervisors and managers will be effective leaders, able to encourage their employees to stretch their capabilities and fulfill their potential. The force will consist of a dynamic mix of trainees, journey level and senior specialists, with each group contributing to the overall mission, bringing unique skills and perspectives to the work place. Our model end state is attainable — and the human resources enabling task provides the roadmap for ensuring we get there.

Enabling Task: Acquire and sustain the human resources required to support the command mission essential tasks.

- □ Develop the command human resources management processes required to provide the quality and quantity of employees to support the command mission by fiscal 2002.
- ☐ Use the processes to put in place a work force by fiscal 2007 that will achieve the fiscal 2009 command objectives.
- □ Ensure our civilian and military forces obtain the experience, education and training needed to support the command mission by fiscal 2004 by developing and implementing programs, policies and formal career paths designed to encourage career broadening and multi-skilling experiences as well as functional and managerial training.

How much does it really cost?

Maj. Gen. Todd StewartDirector of Plans and Programs

etting down and dirty to find out what it really costs the Air Force Materiel Command to provide quality support to its customers rather than just adding on to what was budgeted last year is what the command's business approach is all about.

This philosophy came about in 1998 as Air Force leaders questioned how a non-combat, non aircraft-flying organization could operate more efficiently, to free up resources for urgent readiness and modernization requirements.

How we can work better

To help determine where AFMC could be more efficient,

command senior leaders have selected five strategic objectives, which compose the command's Business Practices Enabling Task. Although efficiency and cost-effectiveness are the main goal, the plans to achieve these objectives are as diverse as the topics.

For example, the unit cost reduction objective concentrates on reducing costs in each of AFMC's mission areas and the strategy involved in accomplishing that goal. Leaders in each of the command mission areas have developed these plans, focused on enhancing efficiency, to yield resources for investment.

Financial management

experts will help the mission area workers assess their progress. AFMC's plans and programs experts will work the programming process to re-apply the resources, freed up by improvements, to corporate priority investments.

People from each of these areas will review the mission area staff's achievement strategies to make sure they can realistically be reached, and that forecast savings are programmed into the fiscal 2004-09 budgeting process. They will work with the mission area staffs to make sure costs will be reduced without cutting back performance, e.g., quality, quantity and capacity, or schedule and timeliness.

Stringent requirements

This objective will be an enduring task, with progressively more stringent requirements for mission area managers to understand the relationships between their costs, resources and outputs. In the coming years finance and plans experts will monitor achievement, provide feedback, and help mission area staffs, as

well as report progress and benefits at business reviews.

The e-Business objective focuses on using Internet technologies to dramatically improve AFMC's business and mission operations. AFMC's commander, Gen. Lester Lyles, commissioned a team to develop an e-Business strategy for two reasons.

First, industry, including many of our strategic partners, is achieving impressive operating efficiencies by using e-Business technologies. Second, command leadership knew there were many e-Business initiatives on-going in the command, and that a more focused approach would help us apply our scarce resources in the highest payoff areas.

A key achievement strategy element centers on tying e-Business pursuits to measures and objectives in the command and center strategic plans, and identifying those opportunities to the affected mission areas to be implemented. After approving

that strategy, Gen. Lyles established the chief technology officer as the command's primary catalyst for e-business transformation — responsible for identifying enterprise-wide e-Business opportunities and helping implement them into mission and functional operations.



The "Thin Client" will reduce cost of hardware and servicing, while the eProcurement Software will precipitate cost reductions of items purchased while reducing acquisition and delivery time and increasing quality of service to our customers. (Photo by Ms. Estella Holmes, AFMC/PA)

Our vision

The AFMC Vision 2020 is linked to Air Force Vision 2020 and Joint Vision 2020. AFMC's Vision is to be, "The recognized leader for equipping and supporting America's aerospace force — the warfighter's first choice."

AFMC's Vision 2020 focuses on six key areas:

People, Expeditionary Aerospace Force support, innovation, modernization, information management and infrastructure. To accomplish this objective, command executives and managers are responsible for making sure AFMC Vision 2020 guides our plans and actions toward our desired future state.

AFMC's Small Business Office makes sure a portion of the command's contract awards go to small businesses, as mandated by Air Force Policy Directive 64-2. Congress establishes annual quantitative goals, and those cascade down to the secretary of the Air Force, the major command and center level.

Joint integrated process team

As a result of declining AFMC awards to small business during the past five years, a joint secretary of the Air Force and AFMC Integrated Process Team was established in August of 2000. The team's primary focus was integrating the AFMC Small Business process into the command planning, program-

Business continued on page 34

Business continued from page 33

ming and budgeting process. This objective was established as a result of that team, and is seen as an improved business practice

The post-strategic sourcing objective seeks to produce efficiencies and reduce administrative overhead by consolidating A-76 contracts.

This objective will be implemented through an integrated process team that will prepare business case analyses to select consolidation candidates.

As the most commercial-like organization in the Air Force,

AFMC is constantly compared to the private sector, and is sometimes seen to be lagging. In an environment of increased public-private competition and privatization, we owe it to ourselves to change this perception. Deploying this business practices enabling task strategic plan to the centers is a step in that direction.

The business practices enabling task strategic objectives represent the balanced activities that good corporations undertake to compete and win: cost control and reduction, adopting new technology, long-term planning, regulatory compliance, and process improvement.

Enabling Task: Continuously improve command business practices and processes to achieve efficiency and effectiveness of our practices and products.

- □ Each Mission Area will improve efficiency and reduce cost of products and services through fiscal 2009.
- □ Leverage e-Business capabilities and information technology to increase the efficiency, speed and effectiveness of key AFMC business processes to enhance achievement of mission essential tasks by fiscal 2002.
- □ Develop an AFMC 2020 vision by fiscal 2002 that supports the global vigilance, reach and power envisioned in the Air Force 2020 Vision.
- ☐ Implement the four AF-wide small business goals.
 - **□** Boost small business participation in acquisition.
 - ☐ Seize a leadership role to broaden responsive small business education programs.
 - ☐ Adapt the small business program to a changing environment.
 - □ Promote participation of historically black colleges and universities and minority institutions in the Air Force.
- ☐ Maximize product and service output efficiency and reduce overhead by consolidating separate A-76 contracted support functions at centers where efficiencies can be gained. Develop an installation and services post-strategic sourcing strategy by Sept. 30, 2001 and implement as soon as practical in accordance with the plan.



The F-22 Raptor, developed at Aeronautical Systems Center, Wright-Patterson Air Force Base, Ohio, and flight tested at Edwards AFB, Calif., is the replacement for the F-15 Eagle air-superiority fighter and will become operational in 2004. It combines stealth design with the supersonic, highly maneuverable, dual-engine, long-range requirements of an air-to-air fighter, and it also will have an inherent air-to-ground capability, if needed. The F-22's integrated avionics gives it a first-look, first-shot, first-kill capability that will guarantee U.S. air dominance for the next three decades. (U.S. Air Force photo by Mr. Kevin Robertson)

Making efficient use of space and improving what we have

Brig. Gen. David M. Cannan Installations and Support Chief Operating Officer

Infrastructure — the basic facilities and equipment the command needs in order to be able to function.

Responsibility for operating, maintaining and improving that infrastructure spreads across several mission areas: information management for communications systems and information technology; depot maintenance and test and evaluation for logistics and test infrastructure; and installations and support for general facilities; utilities and pavements. The infrastructure enabling task strategic plan documents four broad objectives.

Objectives

Right-sizing. We've studied the centers to determine how to better use existing space, where excess facilities can be demolished to save maintenance and repair costs and where new construction can improve mission effectiveness. Our objective is to finalize those plans and obtain the resources needed to implement them over the course of the next several years.

Improve test and evaluation infrastructure. Test and evaluation depends on specialized infrastructure in six categories: modeling and simulation; measurement, integration laboratories, hardware-in-the-loop facilities, installed systems test facilities and open air ranges. We must maintain and modernize those facilities to efficiently and effectively meet current and future requirements.

Improve information management infrastructure. Many AFMC processes currently involve extensive manual paperwork, or have developed locally with varying performance and cost-effectiveness standards. The information management mission area, in collaboration with experts from industry and our installations, will apply the corporate architecture and performance standards process to its information technology, information management and computer operations busi-

Enabling Task: Support the mission and people at AFMC installations with infrastructure that is properly sized, configured, and maintained.

Objectives

- □ Properly size, configure, and maintain facility infrastructure to support the missions and people of AFMC installations by fiscal 2010. Develop right-sizing plans for each Installation by August and program resources in the fiscal 2004-09 Program Objective Memorandum.
- □ Accelerate development and implementation of a consistent facilities infrastructure investment strategy for all mission area's by fiscal 2003.



An aerial view of Wright-Patterson Air Force Base, Ohio, home of Air Force Materiel Command, Aeronautical Systems Center and the Air Force Research Laboratory. The Installations and Support Mission Area is responsible for most AFMC base infrastructure. (Courtesy photo)

ness lines. Using industry and government best-practices, the objective is to provide modernized, standardized, cost-effective telecommunications and information products and services to all customers by fiscal year 2006.

Standardize facility investment strategy. To ensure facility investments made by separate mission areas complement each other and support the command's facility end-state goals, an investment strategy team was created in March 2000 with representatives from civil engineering, logistics, operations, requirements

and the ir Force Research Laboratory. Our objective is to accelerate the development and implementation of a consistent infrastructure investment strategy for all mission areas by fiscal year 2003.

Meeting future challenges

The objectives in this plan will help us meet the challenges of the future, by ensuring our infrastructure is sized, configured and updated to provide effective, reliable, and efficient support to the command's missions.

AFMC's Flight Plan For the Future